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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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PHAM, TUAN				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/634,977

Applicant(s)

SWANT, JOHN M.

Examiner

TUAN A. PHAM

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-4 and 6-14 are rejected under 35 U.S.C.103(a) as being unpatentable over Genell et al. (US Patent No.: 6,122,505, hereinafter, "Genell") in view of Kiukkonen et al. (US Pub. No.: 2004/0203466, hereinafter, "Kiukkonen"), and further in view of Nakamura (US Patent No.: 5,943,617).**

Regarding claims 1, 9, and 14, Genell teaches a method of testing performance of a receiver (see figures 1-3), the method comprising:

establishing a communication link between a transmitter and a receiver (see figure 1, communication link between transmitter in MSC 14 and receiver section 32 in base station 20, col.6, ln.25-52);

transmitting from the transmitter a signal bearing a predetermined message (see figures 1-3, MSC transmit test command to base station for testing receiver section 32, col.6, ln.25-52);

receiving the predetermined message at an antenna coupled to a receiver (see figures 1-3, col.6, ln.25-52);

measuring the power of the signal received by the antenna at a point between the receiver and the antenna (see figures 1-3, measure the RSSI, col.6, ln.25-52);

calculating a bit-error rate of the receiver output to the predetermined message (see col.6, ln.25-52, calculate the BER based on test command receiving from MSC);
and

determining receiver performance by evaluating the bit-error rate, and the received message power (see figures 1-3, col.6, ln.25-52, test receiver performance based on the measurement of RSSI and BER).

It should be noticed that Genell fails to teach calculating a bit-error rate by comparing the condition of the receiver and determining receiver performance by evaluating the predetermined attenuation. However, Kiukkonen teaches calculating a bit-error rate by comparing the condition of the receiver and determining receiver performance by evaluating the predetermined attenuation (see [0024, 0026, 0034-0035], the test signal transmit at predetermine attenuation at 0.1 dB).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kiukkonen into view of Genell in order to improve operability of the base station as suggested by Kiukkonen at [0013].

Genell and Kiukkonen, in combination, fails to teach the control routine having a first predetermined attenuation level automatically followed by a second predetermined

attenuation level. However, Nakamura teaches the control routine having a first predetermined attenuation level automatically followed by a second predetermined attenuation level (see figure 2, test device 15 transmit a test signal repeatedly to receiver 11, five times at a start of the test, col.7, ln.45-59, it is inherent that the test signal that should be included the attenuation db level) .

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Nakamura into view of Genell and Kiukkonen in order to measure condition of up link and down link of service zone.

Regarding claim 2, Kiukkonen further teaches receiver is deployed in a communication network (see [0036] GSM system).

Regarding claim 3, Kiukkonen further teaches cellular network (see [0036] GSM system).

Regarding claim 4, Genell further teaches at least one selected from the group of a voice channel, a data channel, and a control channel (see col.4, ln.1-5).

Regarding claim 6, Genell teaches in a mobile communication network (see figures 1-3), comprising:

a radio base station receiver test system (see figure 1, MSC 14) that transmits a predetermined message (test commands) to a base station receiver (see figure 1, base station 20), that measures received power at the antenna (see figures 1-3, measure the RSSI, col.6, ln.25-52), that calculates the bit-error rate of the predetermined message received by the radio base station receiver (see col.6, ln.25-52, calculate the BER

based on test command receiving from MSC), and determines receiver performance quality as a function of the bit-error rate and measured power (see figures 1-3, col.6, ln.25-52, test receiver performance based on the measurement of RSSI and BER).

It should be noticed that Genell teach predetermined message to a receiver at a predetermined attenuation and determining receiver performance by evaluating the predetermined attenuation. Kiukkonen teaches predetermined message to a receiver at a predetermined attenuation and determining receiver performance by evaluating the predetermined attenuation (see [0024, 0026, 0034-0035], the test signal transmit at predetermine attenuation at 0.1 dB).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kiukkonen into view of Genell in order to improve operability of the base station at suggested by Kiukkonen at [0013].

Genell and Kiukkonen, in combination, fails to teach the control routine having a first predetermined attenuation level automatically followed by a second predetermined attenuation level. However, Nakamura teaches the control routine having a first predetermined attenuation level automatically followed by a second predetermined attenuation level (see figure 2, test device 15 transmit a test signal repeatedly to receiver 11, five times at a start of the test, col.7, ln.45-59, it is inherent that the test signal that should be included the attenuation db level) .

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Nakamura into view of

Genell and Kiukkonen in order to measure condition of up link and down link of service zone.

Regarding claim 7, Kiukkonen further teaches cellular network (see [0036] GSM system).

Regarding claim 8, Kiukkonen further teaches GSM communication network (see [0036] GSM system).

Regarding claim 10, Kiukkonen further teaches the communication routine requests the measured power before the received message enters the receiver (see [0033]).

Regarding claim 11, Kiukkonen further teaches the control routine increases the transmission attenuation level in response to the signal bearing the predetermined message (see [0035-0036]).

Regarding claim 12, Kiukkonen further teaches the communication routine requests the measured power from a power measurement device (see [0026]).

Regarding claim 13, Genell further teaches the evaluation routine medium resides in a MSC test unit (see col.4, ln.12-15, it is clearly seen that the evaluation routine medium resides in a MSC test unit for route the test commands).

4. **Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Genell et al. (US Patent No.: 6,122,505, hereinafter, "Genell") in view of Kiukkonen et al. (US Pub. No.: 2004/0203466, hereinafter, "Kiukkonen") and further in view of Nakamura (US Patent No.: 5,943,617) as applied to claim 1 above, and further in view of Kikuchi (US Patent. No.: 4,709,403, hereinafter, "Kikuchi").**

Regarding claim 5, Genell, Kiukkonen, and Nakamura, in combination, fails to teach increasing the magnitude of the predetermined attenuation until the communication link is dropped. However, Kikuchi teaches increasing the magnitude of the predetermined attenuation until the communication link is dropped (see col.4, ln.44-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kikuchi into view of Genell, Kiukkonen, and Nakamura in order to improve the transmission.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/TUAN A PHAM/

Primary Examiner, Art Unit 2618